

How we will use Airflow



Apache
Airflow

But first...



MOVEMBER[®]

Movember is an annual event involving the growing of **moustaches** during the month of **November** to raise awareness of Men's Health issues, such as **prostate cancer**, **testicular cancer**, and **men's suicide**.

<https://www.movember.com/>

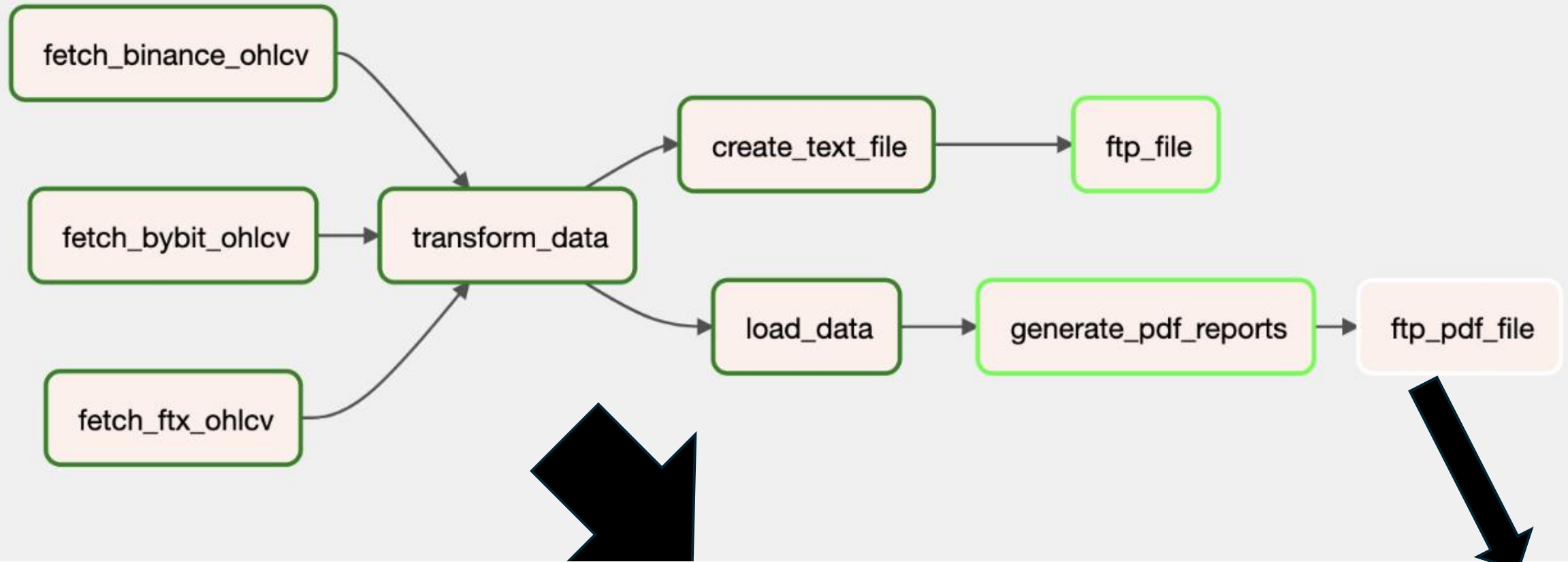
But what is Airflow...

Apache Airflow®

Apache Airflow® is a platform created by the community to programmatically author, schedule and monitor workflows.

[Install Airflow](#)

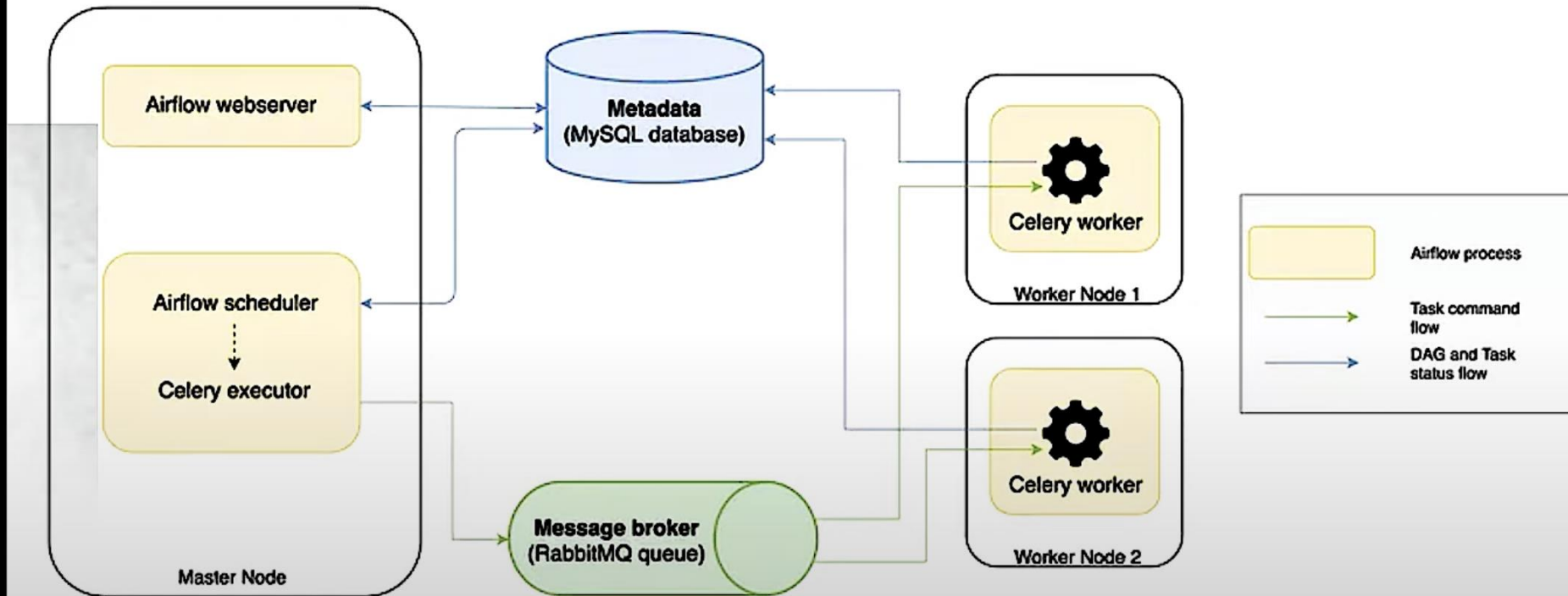
But what is a workflow



Airflow uses **directed acyclic graphs** (DAGs) to manage workflow **orchestration**. Tasks and dependencies are defined in Python and then Airflow manages the scheduling and execution. DAGs can be run either on a defined schedule (e.g. hourly or daily) or based

But how does it work?

AIRFLOW ARCHITECTURE



<https://www.youtube.com/watch?v=hjhclcf5ZwWa%27ilShudar>

But why do we use it at RCS-SIS



Literature

Authors

Jobs

Seminars

Conferences

More...

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[How to search?](#)

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But why do we need it at RCS-SIS



But why do we need (example)



scientific articles

But what is your opinion on it?

- ✓ Easy to follow whats happening
- ✓ Python
- ✓ Versatile

<https://airflow.apache.org/docs/apache-airflow-providers/operators-and-hooks-ref/index.html>

- ❖ No DAG versioning
- ❖ Hard to configure
- ❖ Steep Learning Curve

But can you show us a demo?



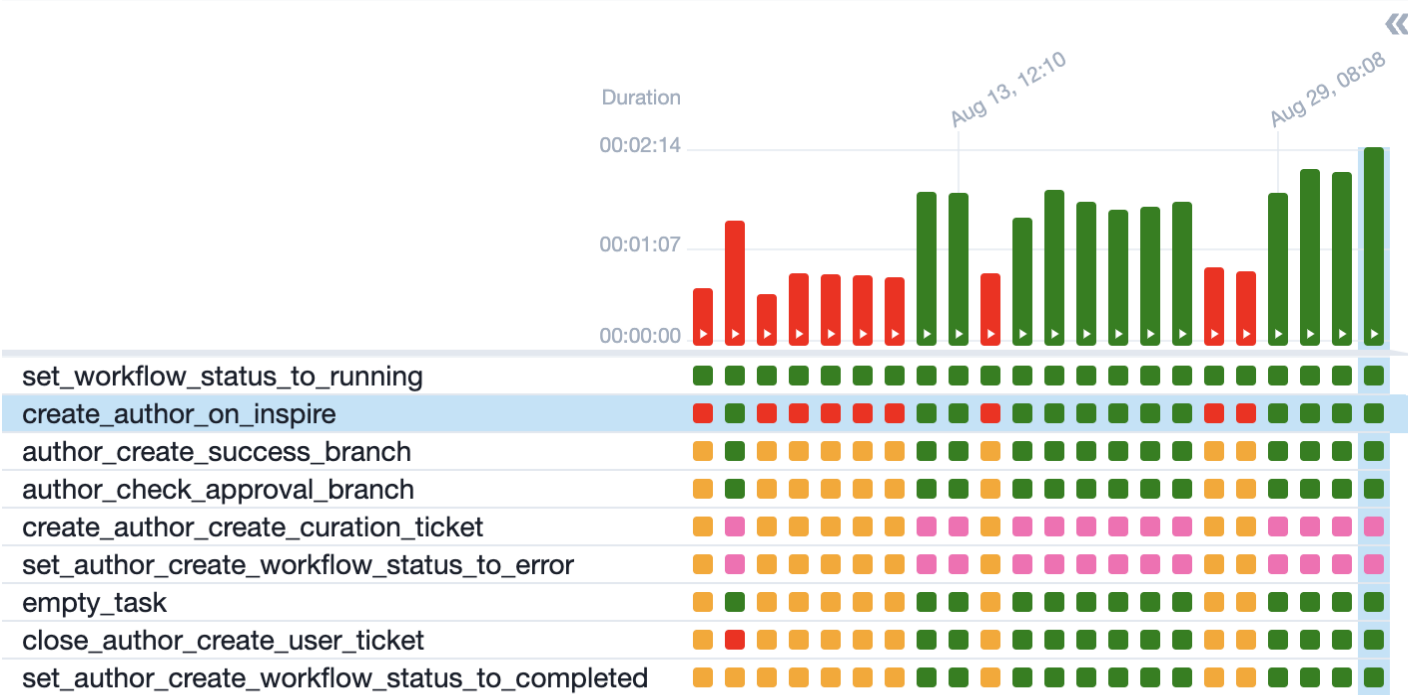
<https://workflows.inspire.dev.siscern.org>

But why thank you



Press **shift** + **/** for Shortcuts

deferred failed queued removed restarting running scheduled shutdown skipped success up_for_reschedule up_for...



DAG
author_create_approved_dag / **Run**
1aede090-d204-4cce-9808-b3b034f57edb

Clear task Mark state as... Filter DAG by task

Details Graph Gantt Code Audit Log Logs XCo

More Details K8s Pod Spec List All Instances

Task Instance Notes

Task Instance Details

Status	success
Task ID	create_author_on_inspire
Run ID	1aede090-d204-4cce-9808-b3b034f57edb

>> DAG **author_create_approved_dag** / ▶ **1aede090-d204-4cce-9808-b3b034f57edb** / **create_author_on_inspire**

Clear task **Mark state as...** **Filter DAG by task**

△ **Details** **Graph** **Gantt** <> **Code** **Audit Log** ≡ **Logs** ⇌ **XCom** ⌚ **Task Duration**

Layout:
Left -> Right

